### **REMARKS**

As a preliminary matter, Applicants wish to clarify that all further communication should be sent to the undersigned. Applicants submitted a Revocation of Power of Attorney and Authorization of Agent signed by one inventor on October 18, 2007 requesting that all future correspondence be sent to the undersigned. Applicants submitted a second Revocation of Power of Attorney and Authorization of Agent on November 20, 2008 signed by the second inventor also requesting that all future correspondence be sent to the undersigned. However, the Office Action mailed on September 18, 2008 was inadvertently mailed to the previous attorney of record whose power of attorney had already been revoked.

Applicants resubmit the amendments to the specification that were submitted in the last Amendment and Response referring to the paragraphs of the originally filed application, not the published application.

Claims 1-3, 6-21, 23 and 24 are pending in the instant application. Claims 7, 11-21, 23 and 24 are withdrawn from consideration while the remaining claims 1-3, 6 and 8-10 are rejected. Applicants herein cancel claims 2 and 9 (and claim 10 as depending upon claim 9) without prejudice. In fact the recitations of claims 1 and 2 are combined. As such, upon entry of the instant Amendment, claims 1, 3, 6-8, 11-21, 23 and 24 will be pending. Applicants were successful in overcoming all of the rejections in the last Amendment and Response except those rejections based upon "claim scope" or "claim breadth."

#### Objection to the Claims

The Examiner objects to claim 1 for referring to "Table –US-2004 (SEQ ID NO:1)." Further, the last sequence allegedly lacks a SEQ ID NO. Applicants herein remove "Table –US-2004" as unnecessary. Applicants respectfully submit that the last sequence is in fact labeled with a SEQ ID NO: as the numbers precede the sequences separated in series by a ";".

# Rejection under 35 USC §112, first paragraph

#### 1. Regarding Written Description

The Examiner rejects claims 1-3, 6 and 8-10 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Allegedly, the claims contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. This rejection is made because:

- i) Applicants are claiming a genus of molecules having part or all characteristics recited in the claims, as well as functional derivatives and active fractions thereof (in claim 2) while the specification only describes one ACA glycoprotein; and
- ii) Applicants are claiming a recombinant protein while the specification only discloses a partial amino acid sequence for the protein.

Regarding "functional derivatives and active fragments" (in claim 2), no biological derivative or active fragment has been described. Therefore, according to the Examiner, only the ACA protein having all the features recited in claims 2-5 (GPI anchored, obtained from human blood, isoelectric point, molecular weight, comprising SEQ ID NO.1-11), but not the full breadth of a surface glycoprotein ACA, functional derivatives, and active fragments thereof meet the written description requirement. Still further, the Examiner says that Applicants are not in possession of the claimed recombinant protein since claim 9 is drawn to a recombinant protein of a surface glycoprotein ACA, for only a partial sequence is provided.

Applicants herein remove "functional derivatives and active fragments" from claim 2 purely in the interest of advancing prosecution. Applicants herein cancel claim 9 (and claim 10 as depending upon claim 9) since this does not affect the scope of patent protection. Finally, Applicants combine claims 1 and 2 effectively adding all of the characteristics of

claim 2 into claim 1. Applicants respectfully submit that in view of these changes to the claims, Applicants have clearly demonstrated possession of the proteins encompassed thereby.

# 2. Regarding Enablement

The Examiner rejects claims 1-3, 6 and 8-10 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the surface glycoprotein ACA, a salt thereof that is characterized by *all* the features\_recited in claims 2-6 and 8-10, does not reasonably enable any and all surface glycoprotein ACA, functional derivatives, active fragments, and recombinant proteins thereof that is characterized by the features disclosed in claims 2-5 and 8-10. According to the Examiner, Applicants are claiming a genus of molecules including any and all ACA glycoproteins having part or all of the features recited in the claims, functional derivatives, active fragments, recombinant protein thereof.

As noted above, Applicants herein remove "functional derivatives and active fragments" from claim 2 purely in the interest of advancing prosecution. Applicants herein cancel claim 9 (and claim 10 as depending upon claim 9) since this does not affect the scope of patent protection. Finally, Applicants combine claims 1 and 2 effectively adding all of the characteristics of claim 2 into claim 1. Applicants respectfully submit that in view of these changes to the claims, one of ordinary skill in the art could clearly make and use the proteins encompassed thereby without undue experimentation.

## **FEES**

No additional fees are believed necessary in connection with the present submission, however, should this be in error, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment or to credit any overage.

### **CONCLUSION**

It is believed that all of the claims are patentable and early notification as such is earnestly solicited. If any issues may be resolved by way of telephone, the Examiner is invited to call the undersigned at the telephone number indicated below.

Respectfully submitted,

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